CLAIMS

What is claimed is:

1. An insertion plate, comprising:

a base;

a first mounting element of the base operable to engage a first member of an intervertebral disc replacement device; and

a second mounting element of the base operable to engage a second member of the intervertebral disc replacement device,

wherein the first and second mounting elements cooperate to engage and orient the first and second members of the intervertebral disc replacement device for simultaneous insertion into an intervertebral disc space of a spinal column.

2. The insertion plate of claim 1, wherein:

each of the first and second members include articulation surfaces that cooperate to facilitate articulation of adjacent vertebral bones of the intervertebral disc space when the intervertebral disc replacement device is disposed in the intervertebral disc space; and

the insertion plate cooperates to orient the articulation surfaces in substantial registration with one another for simultaneous insertion into the intervertebral disc space.

3. The insertion plate of claim 1, wherein at least one of the first and second mounting elements includes a flange having a mounting hole therethrough, the mounting hole for receiving a fastener to couple the flange to at least one of the first and second members of the intervertebral disc replacement device.

4. The insertion plate of claim 3, wherein the fastener is a mounting screw operable to engage a threaded bore in the at least one of the first and second members of the intervertebral disc replacement device.

5. The insertion plate of claim 1, further comprising a ledge member

extending from a posteriorly directed surface of the base, the ledge member being sized and shaped to extend at least partially between the first and second members of the intervertebral disc replacement device such that they may be at least one of inserted into and moved within the intervertebral disc space without substantially changing their orientation with respect to one another.

6. The insertion plate of claim 5, wherein at least one of:

at least one of the first and second spaced apart surfaces of the ledge member are contoured for engagement with respective surfaces of the first and second members of the intervertebral disc replacement device; and

the first surface of the ledge member is curved and the second surface of the ledge member is flat.

7. The insertion plate of claim 5, wherein at least one of:

each of the first and second mounting elements includes a flange having a mounting hole therethrough, the mounting holes for receiving respective fasteners to couple the flanges to respective ones of the first and second members of the intervertebral disc replacement device;

the mounting holes are oriented in a direction substantially parallel to a longitudinal axis of the spinal column; and

the ledge member extends in a direction along the posteriorly directed surface of the base that is substantially transverse with respect to the longitudinal axis of the spinal column.

8. The insertion plate of claim 1, further comprising an insertion member extending away from an anteriorly directed surface of the base and operable to facilitate movement of the intervertebral disc replacement device and insertion thereof into the intervertebral disc space.

9. The insertion plate of claim 8, wherein the insertion member includes an anteriorly extending stem to facilitate movement of the intervertebral disc replacement device such that the first and second members may be at least one of inserted into and moved within the intervertebral disc space without substantially

changing their orientation with respect to one another.

10. The insertion plate of claim 9, wherein the stem is sized and shaped for engagement with an insertion handle to further facilitate movement of the intervertebral disc replacement device.

11. The insertion plate of claim 10, wherein the stem is detachable from the insertion handle to facilitate removal of the handle when the intervertebral disc replacement device is positioned within the intervertebral disc space.

12. The insertion plate of claim 11, wherein one of the stem and the insertion handle includes a bore and the other of the stem and the insertion handle includes a tapered shaft that frictionally engages the bore to facilitate detachable engagement with one another.

13. The insertion plate of claim 1, wherein the base is operable to detachably engage a flange of the first member of the intervertebral disc replacement device, and to detachably engage a flange of the second member of the intervertebral disc replacement device, wherein the first and second flanges include one or more respective through holes for receiving bone screws for fastening the first and second members to respective adjacent vertebral bones of the intervertebral disc space of the spinal column, and the base cooperates to orient the through holes of the first and second flanges of the intervertebral disc replacement device to have a configuration substantially similar to that of a spinal fusion plate when viewed from an anterior vantage point.

14. The insertion plate of claim 13, wherein the base cooperates to maintain the first and second members of the intervertebral disc replacement device in a substantially registered orientation for simultaneous insertion into the intervertebral disc space.

15. An apparatus for replacing at least a portion of an intervertebral disc in a spinal column, comprising:

first and second members of an intervertebral disc replacement device; and

an insertion plate detachably coupled to each of the first and second members of the intervertebral disc replacement device and operable to orient them for simultaneous insertion into an intervertebral disc space of the spinal column defined by respective endplates of adjacent vertebral bones.

16. The apparatus of claim 15, wherein the apparatus is at least part of a sterile assembly disposed in a sealed package.

17. A method for replacing at least a portion of an intervertebral disc in a spinal column, comprising the steps of:

removing the portion of the intervertebral disc from the spinal column; and

simultaneously inserting first and second members of an intervertebral disc replacement device into an intervertebral disc space of the spinal column, the first and second members being engageable with and operable to permit adjacent vertebral bones defining the intervertebral disc space to articulate with respect to one another, and the first and second members being detachably coupled to an insertion plate that is operable to orient the first and second members with respect to one another for such insertion.

18. The method of claim 17, further comprising the step of manipulating the first and second members as a single unit by way of the insertion plate such that they may be at least one of inserted into and moved within the intervertebral disc space without substantially changing their orientation with respect to one another.

19. The method of claim 17, further comprising the step of detaching the insertion plate from the first and second members after they have been coupled to the vertebral bones.